

AMENDMENT

Please replace all prior versions and listings of claims with the following listing of claims.

LISTING OF CLAIMS:

1. (Currently Amended) A mobile system responsive to a user generated natural language speech utterance, comprising:

~~a speech unit that receives a the user-generated~~ natural language speech utterance ~~from a user~~ and ~~converts~~ encodes the received ~~user-generated~~ natural language speech utterance into an electronic signal; and

a natural language speech processing system that receives, processes, and responds to the ~~electronic signal~~ encoded natural language speech utterance using data received from a plurality of domain agents, wherein the natural language speech processing system includes:

a speech recognition engine that identifies recognizes at least one of words or phrases in the encoded natural language speech utterance using a query or a command ~~from the received electronic signal using data received from the~~ supplied by a plurality of domain agents;

a parser that interprets the recognized words or phrases using the data received from the plurality of domain agents, wherein the parser interprets the recognized words or phrases by:

determining a context for the natural language speech utterance;

selecting that selects at least one of the plurality of domain agent agents based on associated with the determined context; and

transforming the recognized words or phrases into at least one of a question identified query or a command from among the plurality of domain agents, and that forwards the identified query at least one question or command formulated in a grammar that to the selected domain agent, wherein the selected domain agent uses to process is an autonomous executable that

~~receives, processes, and responds to the identified query formulated question~~
~~or command; and~~

~~an agent architecture that communicatively couples the selected domain agent~~
~~having access to services of associated with each of an agent manager, a system agent,~~
~~the plurality of domain agents, [[:]] and an agent library, wherein a transceiver in~~
~~communication with the selected domain agent, wherein the transceiver receives a~~
~~response to the identified query or command from the selected domain agent uses the~~
~~communicatively coupled services to create a response to the formulated question or~~
~~command and format transmits an electronic message associated the received~~
~~response for presentation to the user.~~

2. (Currently Amended) The mobile system according to claim 1, wherein the natural language speech processing system further includes an event manager that sends and receives events to components of the natural language speech processing system to coordinate ~~coordinates~~ interaction among ~~a plurality of the~~ components ~~of associated with~~ the natural language speech processing system.

3. (Cancelled)

4. (Currently Amended) The mobile system according to claim [[3]] 1, wherein the ~~received~~ response includes a text string[[.]] and ~~wherein~~ the natural language speech processing system further includes a text to speech engine that creates an encoded ~~uses the~~ data ~~supplied by the plurality of domain agents to convert the text string to a speech message~~ to be annunciated to ~~included in the transmitted electronic message~~ user.

5. (Cancelled)

6. (Previously Presented) The mobile system according to claim 1, wherein the selected domain agent includes data associated with at least one of driving directions, travel

information, restaurant information, vehicle systems information, safety information, or entertainment information.

7. (Previously Presented) The mobile system according to claim 1, wherein the selected domain agent includes data for communicating with one or more devices.

8. (Previously Presented) The mobile system according to claim 7, wherein the data for communicating with the one or more devices includes data for controlling the one or more devices.

9. (Cancelled)

10. (Currently Amended) The mobile system according to claim [[9]] 1, wherein at least one of the one or more devices is associated with a vehicle.

11. (Currently Amended) The mobile system according to claim 10, wherein at least one of the speech unit[[,]] or the natural language speech processing system, ~~or the transceiver~~ is located remotely from the vehicle.

12. (Previously Presented) The mobile system according to claim 10, wherein the device associated with the vehicle is at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system, or a vehicle media system.

13. (Currently Amended) The mobile system according to claim 1, wherein the communicatively coupled services include ~~transmitted electronic message is sent to~~ at least one remotely located service and the selected domain agent includes data for controlling or communicating with the remotely located service.

14. (Previously Presented) The mobile system according to claim 13, wherein the remotely located service includes at least one of a payment service provider, a customer relationship management system, a specialized service, a location service, or an emergency service.

15. (Currently Amended) The mobile system according to claim 13, wherein the speech unit and the natural language speech processing system each include respective transceivers that communicate ~~transmitted electronic message is transmitted~~ via a communication network.

16. (Original) The mobile system according to claim 15, wherein the communication network is a wide area wireless network.

17. (Currently Amended) The mobile system according to claim ~~[[1]]~~ 15, wherein the transceiver is a wide-area RF transceiver.

18. (Currently Amended) The mobile system according to claim 1, wherein the speech unit includes ~~at least one of~~ a speech coder that encodes the natural language speech utterance into the electronic signal, an array microphone that receives the natural language speech utterance, ~~or and~~ a filter that optimizes a signal to noise ratio of the encoded natural language speech utterance.

19. (Original) The mobile system according to claim 18, wherein the filter employs adaptive echo cancellation.

20. (Original) The mobile system according to claim 18, wherein the array microphone is at least a one-dimensional array.

21. (Original) The mobile system according to claim 18, wherein the speech coder uses an adaptive lossy audio compression.

22. (Currently Amended) The mobile system according to claim 1, wherein the speech unit is located remotely from ~~at least one of the natural language speech processing system or the transceiver.~~
23. (Previously Presented) The mobile system according to claim 1, further comprising at least one of a display or a keypad.
24. (Currently Amended) The mobile system according to claim 1, further comprising a telematics control unit that interfaces with one or more devices on a vehicle.
25. (Currently Amended) The mobile system according to claim 24, wherein at least one of the speech unit[,], or the natural language speech processing system,~~or the transceiver~~ is embedded in the telematics control unit.
26. (Currently Amended) The mobile system according to claim 1, wherein at least one of the speech unit[,], or the natural language speech processing system,~~or the transceiver~~ is embedded ~~into~~ in at least one of a vehicle, a handheld device, a fixed computer, or a mobile computer device.
27. (Currently Amended) The mobile system according to claim 1, wherein the communicatively coupled services include further comprising at least one ~~network resource shared by a plurality of devices, the shared network resource including at least one of the speech unit, the natural language speech processing system, the transceiver, the plurality of agents, user profiles, event histories, or dialogue histories.~~
28. (Currently Amended) A method responsive to a user generated natural language speech utterance, comprising:

receiving, at a speech unit, ~~the user generated a~~ natural language speech utterance[(:)],
wherein the speech unit encodes converting the received ~~user generated~~ natural language
speech utterance into an electronic signal;

recognizing, at a speech recognition engine, identifying at least one of words or phrases
in the encoded natural language speech utterance, wherein the speech recognition engine uses
~~a query or a command from the electronic signal using data supplied by received from~~ a
plurality of domain agents to recognize the words or phrases;

determining, at a parser, a context for the natural language speech utterance;

selecting, at the parser, at least one of domain agent from among the plurality of
domain agents, ~~the selected domain agent associated with the identified query or command~~
based on the determined context;

transforming, at the parser, the recognized words or phrases into at least one of a
question or a command, the at least one question or command formulated in a grammar that
the selected domain agent uses to process the formulated question or command; and

forwarding the ~~identified query~~ formulated question or command to an agent
architecture, the agent architecture communicateively coupling ~~selected domain agent~~,
~~wherein the selected domain agent is an autonomous executable that receives, processes, and~~
~~responds to the forwarded query or command, the selected domain agent having access to~~
~~services of associated with each of an agent manager, a system agent, the plurality of domain~~
~~agents[(:)], and an agent library, wherein~~ receiving a response to the forwarded query or
command from the selected domain agent uses the communicatively coupled services to
create a response to the formulated question or command[(:)] and format ~~transmitting an~~
~~electronic message associated with the received response for presentation to the user.~~

29. (Currently Amended) The method according to claim 28, wherein the speech unit
includes further comprising coding the electronic signal using at least one of a speech coder, an
array microphone that receives the natural language speech utterance, a speech coder that
encodes the natural language speech utterance into the electronic signal, and ~~or~~ a filter that

optimizes a the electronic signal coded using an adaptive lossy audio compression to noise ratio of the encoded natural language speech utterance.

30. (Previously Presented) The method according to claim 28, the wherein the selected domain agent includes data for controlling or communicating with at least one of a navigation system, a vehicle monitoring system, a security system, a vehicle control system, or a vehicle media system.

31. (Previously Presented) The method according to claim 28, wherein the selected domain agent includes data associated with at least one of driving directions, travel information, restaurant information, vehicle systems information, safety information, or entertainment information.

32. (Currently Amended) The method according to claim 28, wherein the communicatively coupled services include at least one remotely located service and the selected domain agent includes data for controlling or communicating with ~~[[a]]~~ the remotely located service.

33. (Currently Amended) The method according to claim 32, wherein forwarding the formulated question ~~identified query~~ or command to the selected domain agent architecture includes transmitting a request to the remotely located service.

34. (Previously Presented) The method according to claim 33, wherein the remotely located service is associated with a remotely located device.

35. (Currently Amended) The method according to claim 33, wherein the ~~transmitted~~ request is transmitted to the remotely located service via a communication network.

36. (Currently Amended) The method according to claim 32, wherein the remotely located service includes at least one of a payment service provider, a customer relationship management system, a specialized service, a location service, or an emergency service.

37. (Currently Amended) The method according to 33, wherein the request is transmitted to the remotely located service via a wide-area RF transceiver.

38. (Currently Amended) The method according to [[28]] 29, ~~wherein further comprising filtering the filter received user generated natural language speech utterance to remove removes~~ background noise to optimize the signal to noise ratio of the encoded natural language speech utterance.

39. (Currently Amended) The method according to [[38]] 29, wherein ~~filtering the filter received user generated natural language speech utterance includes employing~~ employs at least one of adaptive echo cancellation or adaptive lossy audio compression to optimize the signal to noise ratio of the encoded natural language speech utterance.

40. (Cancelled)

41. (Currently Amended) The method according to claim 28, wherein the communicatively coupled services include one or more ~~further comprising retrieving data from a network resource shared by a plurality of devices, the shared network resources resource including at least one of a speech unit, a natural language speech processing system, a transceiver, the plurality of agents, user profiles, event histories, or dialogue histories.~~

42. (Currently Amended) The method according to claim 41, wherein the shared network ~~resource is associated with~~ resources include a telematics control unit that interfaces with one or more devices on a vehicle.

43. (Currently Amended) The method according to claim 42, wherein the shared network resources further include at least one resource ~~[[is]]~~ located remotely from the vehicle.

44-56. (Cancelled)